

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Withdrawn) A circuit for operation of a gas discharge lamp with a switching transformer, wherein the switching transformer comprises a switch, a converter inductor and a control means in a control loop for measuring a lamp voltage and setting a desired power, wherein the switching transformer further comprises a second control loop for adjusting parameters including at least one of rise time and steepness of regions of a measured lamp waveform.

2.(Withdrawn) The circuit as claimed in claim 1, wherein the control loop comprises a third inner control loop.

3.(Withdrawn) The circuit as claimed in claim 2, wherein the third inner control loop comprises a computer circuit.

4.(Withdrawn) The circuit as claimed in claim 3, wherein the computer circuit is controlled by a commutation signal.

5.(Withdrawn) The circuit as claimed in claim 2, wherein the third inner control loop comprises a memory.

6.(Withdrawn) The circuit as claimed in claim 1, wherein the second control loop comprises an integrating controller.

7.(Withdrawn) The circuit as claimed in claim 1, wherein the second control loop comprises a measuring filter.

8.(Withdrawn) A measuring filter for a circuit for operation of a gas discharge lamp with a switching transformer, wherein the switching transformer comprises a switch, a converter inductor and a control means, wherein the measuring filter comprises two sample-and-hold stages for measuring a lamp waveform used to determine parameters including at least one of rise time and steepness of regions of the measured lamp waveform;.

9.(Withdrawn) The measuring filter as claimed in claim 8, further comprising an adder.

10.(Withdrawn) The measuring filter as claimed in claim 8, wherein the measuring filter is controlled by a clock signal.

11.(Previously Presented) A method for operation of a gas discharge lamp with a switching transformer, wherein the switching transformer comprises a switch, a converter inductor and a control means in a control loop for measuring a lamp voltage and setting a desired power, the method comprising the acts of:

measuring values of at least one operational datum of the lamp varying with time,

comparing the measured operational data with calculated operational data,

adjusting parameters necessary for calculation, said parameters including at least one of rise time and steepness of regions of a measured lamp waveform, and

selecting a duty factor of a supply current in dependence on

the adjusted parameters.

12.(Withdraw) A method for operation of a gas discharge lamp with a switching transformer, wherein the switching transformer comprises a switch, a converter inductor and a control means in a control loop for measuring a lamp voltage and setting a desired power, the method comprising the acts of:

measuring values of at least one operational datum of the lamp varying with time,

comparing the measured operational data with calculated operational data,

adjusting parameters necessary for calculation, said parameters including at least one of rise time and steepness of regions of a measured lamp waveform, and

selecting a frequency of an alternating voltage or an alternating current in dependence on the adjusted parameters.

13.(Withdrawn) A method for operation of a gas discharge lamp with a switching transformer, wherein the switching transformer comprises a switch, a converter inductor and a control means in a

control loop for measuring a lamp voltage and setting a desired power, the method comprising the acts of:

measuring values of at least one operational datum of the lamp varying with time,

comparing the measured operational data with calculated operational data,

adjusting parameters necessary for calculation, said parameters including at least one of rise time and steepness of regions of a measured lamp waveform, and

selecting a value of a supply current in dependence on the adjusted parameters.

14. (Previously Presented) The method as claimed in claim 11, wherein initially set parameters are parameters of a new lamp.

15. (Previously Presented) The method as claimed in claim 11, wherein the parameters are storable in a memory.

16. (Previously Presented) The method as claimed in claim 11, wherein in steady-state operation the parameters inside the memory

are exactly those of the connected lamp.

17.(Withdrawn) A circuit or operation of a gas discharge lamp with a switching transformer, wherein the switching transformer comprises a switch, a converter inductor and a control means in a control loop for measuring a lamp voltage and setting a desired power, wherein the switching transformer further comprises an inner control loop for adjusting parameters including at least one of rise time and steepness of regions of a measured lamp waveform.

18.(Withdrawn) A data and video projector having a circuit as claimed in claim 1.

19.(Previously Presented) A data and video projector having a circuit for implementing a method as claimed in claim 11.

20.(New) The method of claim 11, further comprising the act of selecting a frequency of an alternating voltage or an alternating current in dependence on the adjusted parameters.

21.(New) The method of claim 11, further comprising the act of selecting a value of a supply current in dependence on the adjusted parameters.